

In the Claims

1 (currently amended). A method for the ~~stabilisation~~stabilization of nucleic acid from a biological sample, which comprises:

- (a) collecting a biological sample;
 - (b) treating the sample so that a proportion of the 2', 3' or 5'-OH positions of the nucleic acid are modified with a protecting group; and
 - (c) subjecting the treated sample to one or more steps to isolate nucleic acid therefrom;
- wherein the modified nucleic acid is subjected to a deprotection step comprising treatment with a primary amine to remove the protecting group.

2 (previously presented). The method according to claim 1, wherein the biological sample comprises viruses, cells, body fluids, blood, serum or plasma.

3 (previously presented). The method according to claim 1, wherein the biological sample comprises a clinical sample or a human pathogen.

4 (previously presented). The method according to claim 1, wherein the nucleic acid is single or double stranded RNA or DNA.

5 (previously presented). The method according to claim 4, wherein the sample is treated with a reactant capable of covalently modifying the 2'-OH position of the ribose rings of the RNA.

6 (previously presented). The method according to claim 1, wherein step (b) is carried out in the presence of an organic solvent.

7 (previously presented). The method according to claim 6, wherein the organic solvent has a flashpoint above 37°C.

8 (previously presented). The method according to claim 6, wherein the organic solvent is capable of forming a homogeneous solution with human blood when mixed in a ratio of 5:1 (vol:vol).

9 (previously presented). The method according to claim 1, wherein the primary amine is ethylenediamine, diethylenetriamine, triethylenetetramine, lysine or arginine.

10 (currently amended). The method according to claim 1, wherein step (c) comprises:

- (i) binding the nucleic acid to a solid phase;
- (ii) ~~optionally~~ washing the solid phase to remove contaminants; and
- (iii) ~~optionally~~ eluting the nucleic acid from the solid phase.

11 (previously presented). The method according to claim 10, wherein the solid phase comprises magnetic particles.

12 (previously presented). The method according to claim 10, wherein the solid phase contains a metal or metal ion capable of coordinating with phosphate.

13 (previously presented). The method according to claim 12, wherein the nucleic acid is eluted with a chelator.

14 (previously presented). The method according to claim 13, wherein the chelator is EGTA and elution is carried out at a pH above 9.

15 (currently amended). The method according to claim 13, wherein the chelator is a ~~salt of ammonia or tetra-alkylammonium~~ ammonia salt or a tetra-alkylammonium salt.

16 (previously presented). The method according to claim 13, which further comprises removing the chelator from the nucleic acid by ultrafiltration, photosensitivity of the chelator or affinity purification using an affinity tag on the chelator.

17 (previously presented). The method according to claim 12, wherein the solid phase comprises hydroxylapatite.

18 (previously presented). The method according to claim 17, wherein the hydroxylapatite is pretreated with a phosphate-containing compound.

19 (previously presented). The method according to claim 17, wherein the hydroxylapatite is washed in step (ii) with an amine.

20 (previously presented). The method according to claim 19, wherein the amine is a primary amine.

21 (previously presented). The method according to claim 20, wherein the deprotection step comprises step (ii).

22 (currently amended). The method according to ~~claim 9~~ claim 10, wherein ~~the deprotection step~~ a deprotection step occurs between step (i) and step (ii).

23 (previously presented). The method according to claim 10, wherein the solid phase comprises silica.

24 (previously presented). The method according to claim 10, wherein the solid phase has immobilised thereon nucleic acid complementary to the nucleic acid targeted for isolation.

25 (previously presented). The method according to claim 24, wherein the nucleic acid targeted for isolation is RNA, which is subjected to the deprotection step prior to binding to the solid phase.

26-44 (canceled).

45 (new) The method according to claim 1, further comprising subjecting said isolated nucleic acid to an analytical procedure comprising hybridization and other like protocols or an enzymatic assay comprising RT-PCR and other like protocols.

46 (new). A method for the stabilization of nucleic acid from a biological sample, which comprises:

(a) collecting a biological sample and adding said biological sample to an organic solvent containing a nucleic acid protecting group;

(b) treating the sample so that a proportion of the 2', 3' or 5'-OH positions of nucleic acids within said biological sample are modified with a protecting group to form a stabilized nucleic acid; and

(c) isolating the stabilized nucleic acid from said biological sample, wherein said isolation comprises:

- i) providing a composition comprising a primary amine and a solid phase comprising hydroxylapatite;
- ii) mixing said biological sample with said composition;
- iii) deprotecting said stabilized nucleic acid comprising treatment of said biological sample with said composition to remove the protecting group;
- iv) washing the solid phase to remove contaminants; and
- v) eluting the stabilized nucleic acid from the solid phase to isolate said nucleic acid.

47 (new). The method according to claim 46, wherein the biological sample comprises viruses, cells, body fluids, blood, serum or plasma.

48 (new). The method according to claim 46, wherein the biological sample comprises a clinical sample or a human pathogen.

49 (new). The method according to claim 46, wherein the nucleic acid is single or double stranded RNA or DNA.

50 (new). The method according to claim 49, wherein the sample is treated with a reactant capable of covalently modifying the 2'-OH position of the ribose rings of the RNA.

51 (new). The method according to claim 46, wherein the organic solvent has a flashpoint above 37°C.

52 (new). The method according to claim 46, wherein the organic solvent is capable of forming a homogeneous solution with human blood when mixed in a ratio of 5:1 (vol:vol).

53 (new). The method according to claim 46, wherein the primary amine is ethylenediamine, diethylenetriamine, triethylenetetramine, lysine or arginine.

54 (new). The method according to claim 46, wherein the solid phase comprises magnetic particles.

55 (new). The method according to claim 46, wherein the solid phase contains a metal or metal ion capable of coordinating with phosphate.

56 (new). The method according to claim 46, wherein the nucleic acid is eluted with a chelator.

57 (new). The method according to claim 56, wherein the chelator is EGTA and elution is carried out at a pH above 9.

58 (new). The method according to claim 56, which further comprises removing the chelator from the nucleic acid by ultrafiltration, photosensitivity of the chelator or affinity purification using an affinity tag on the chelator.

59 (new). The method according to claim 46, wherein the solid phase comprises a nucleic acid complementary to the nucleic acid.

60 (new). The method according to claim 53, wherein said primary amine is ethylenediamine.

61 (new). The method according to claim 53, wherein said primary amine is diethylenetriamine.

62 (new). The method according to claim 53, wherein said primary amine is triethylenetetraamine.

63 (new). The method according to claim 53, wherein said primary amine is lysine.

64 (new). The method according to claim 53, wherein said primary amine is arginine.

65 (new). The method according to claim 46, wherein said solid phase comprising hydroxylapatite are magnetic beads.